



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/586,977	06/05/2000	Bruno Basquin	032326-031	8497

21839 7590 11/10/2003

BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

TRAN, TONGOC

ART UNIT	PAPER NUMBER
----------	--------------

2134

DATE MAILED: 11/10/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/586,977

Applicant(s)

BASQUIN, BRUNO

Examiner

Tongoc Tran

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 05 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to applicant's application serial no. 09/586977 filed on 6/5/2000.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 1/10/2001 has been considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Rikuna (U.S. Patent No. 4,752,678).

5. In respect to claim 1, Rikuna discloses a processor for pre-controlling the execution of a program contained in a second chip card, inserted in a terminal, in addition to a first chip card, containing data and connected to a telecommunication network to which the terminal is linked comprising the step of authenticating one of the first and second cards by the other, prior to the execution of the program (see col. 2, line 67-col. 3, line 13).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2134

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2, 4, 6, 8, 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shona (U.S. Patent No. 5,799,085) in view of Turban (U.S. Patent No. 5,586,166).

8. In respect to claim 1, Shona discloses a processor for pre-controlling the execution of a program contained in a second chip card, inserted in a terminal, in addition to a first host device, comprising the step of authenticating one of the host device and second cards by the other, prior to the execution of the program (see col. 2, lines 43-54).

Shona does not explicitly disclose said host device is a chip card and the second chip card is connected to a telecommunication network to which the terminal is linked. However, Turban discloses a chip card with means for checking whether a further chip card has been installed into the same telecommunication terminal and two chip cards can received signals and useful data from one another (see col. 3, lines 18-26). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Shona's mutual authentication system with Turban's plurality chip card communicating over the telecommunication network for the benefit of enabling the chip card to make direct data exchange between telecommunication network and chip card (also see col. 2, lines 41-49).

Art Unit: 2134

9. In respect to claim 2, Shona and Turban disclose the process of claim 1. Shona further discloses wherein the authentication involved an authentication of the second card by the first chip card, and comprises the following steps:

“applying an identifier of the program which is transmitted from the second card to the first card and a key to an algorithm, containing in the first card, to produce a result (see col. 2, lines 63-67), and

comparing the result and a certificate which is transmitted by the second card to the first card in order to execute the program only in case the latter two are equal” (see col. 3, lines 1-12).

10. In respect to claim 4, Shona and Turban disclose the process of claim 1. Shona further discloses wherein the authentication involves an authentication of the second card by the first card, and comprises the following steps:

transmitting a random number from the first card to the second card (see col. 2, lines 63-67);

applying the transmitted random number and a key to an algorithm contained in the second card to produce a signature that is transmitted to the first card (see col. 3, lines 1-5);

applying the random number and a key to an algorithm containing in the first card to produce a result (see col. 3, lines 5-8); and

comparing the result to the signature transmitted to the first card as to execute the program only when the two are equal (see col. 3, lines 8-12).

Art Unit: 2134

11. In respect to claim 6, Shona and Turban disclose the process in according to claim 1, wherein the authentication involves an authentication of the first card by the second card, and comprises the following steps:

transmitting a predetermined field of a number from the first card to the second card (see col. 3, lines 15-21); and
comparing the predetermined field to a number in the second card so as to execute the program or to read its content only when the two are equal (see col. 3, lines 22-30).

12. In respect to claim 8, Shona and Turban disclose the process in according to claim 1. Shona further discloses wherein the authentication involves an authentication of the first card by the second card, and comprises the following steps:

reading a random number from the first card into the second card (see col. 3, lines 15-18);
applying the random number and a key to an algorithm contained in the first card so as to produce a signature transmitted to the second card (see col. 3, lines 18-21);
applying the random number and a key to an algorithm contained in the second card so as to produce a result (see col. 3, lines 22-26); and
comparing the result to the signature transmitted to the second card so as to execute the program or read its content only when the two are equal (see col. 3, lines 2, lines 24-30).

Art Unit: 2134

13. In respect to claim 10, Shona and Turban disclose the process in accordance with claim 1. Shona further discloses said process comprising a first authentication of one card by the other card and a second authentication of the other card by said one card which follows the first authentication when said one card is authenticated by the other card and which is followed by the execution of the program when the other card is authenticated by said one card (see col. 2, line 63-col. 3, line 30).

14. In respect to claim 11, Shona and Turban disclose the process of claim 1. wherein at least one part of the authentication is executed only in response to an authentication request, transmitted from the second card to the first card (see col. 2, lines 63-67).

15. In respect to claim 12, Shona and Turban disclose the process of claim 1. Turban further discloses wherein authentication steps are executed in a server of the telecommunication network in response to a request from the first card (see col. 3, lines 37-46).

16. In respect to claim 13, Shona and Turban disclose the process according to claim 1. Shona further discloses said process including the steps of reading of the characteristics for the execution of the program in the second card, by the first card or the terminal in response to an introduction of the second card in a reading means linked to the terminal, and analysis of the characteristics in comparison to the material and software capacities of the first card and/or the terminal to reject the second card when said characteristics are incompatible with the first card and/or the terminal (see col. 2, line 63-col. 3, line 12).

Art Unit: 2134

17. In respect to claim 14, Shona and Turban disclose the process in accordance with claim 1. Turban further discloses including the step, between the authentication of card and the execution of the program, of remotely loading the program from the second card into the first card for a program execution in the first card (see col. 4, lines 57-64).

18. In respect to claim 15, Shona discloses Turban disclose the process in accordance with claim 1. Turban further discloses wherein the program is launched on command from the first card to be executed in the second card and exchanges of commands and responses are made between the second card and the terminal (see col. 4, lines 57-64).

19. In respect to claim 16, Shona and Turban disclose the process of claim 15. Turban further discloses wherein said exchanges are made directly between the second card and the terminal (see col. 4, lines 57-64).

20. In respect to claim 17, discloses the process of claim 15, wherein said exchanges between the second card and the terminal are made through the first card (see col. 3, lines 48-52).

21. In respect to claim 18, Shona and Turban disclose the process of claim 1. Shona further including the step, between the authentication of card and the execution of program, of remotely loading the program from the second card into the terminal for program execution in the terminal (see col. Col. 4, lines 57-64).

22. In respect to claim 19, Shona and Turban disclose the process of claim 1. Turban further discloses wherein the telecommunication network is a radio telephone

Art Unit: 2134

network, the terminal is a mobile radio telephone terminal, and the first card is a subscriber identity card (see col. 2, lines 22-31 and col. 4, lines 1-3).

23. Claim 3, 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shona (U.S. Patent No. 5,799,085) and Turban (U.S. Patent No. 5,586,166) as applied to claim 2 above, and further in view of Wasilewski et al. (U.S. Patent No. 6,424,714).

24. In respect to claim 3, Shona and Turban disclose the process of claim 2. Shona discloses enciphers random number (identifier) with the first authentication key contained in the first card to create enciphered data X (see col. 3, lines 5-8) but do not explicitly disclose the step of selecting the key in a table of keys contained in the first card as a function of the program identifier. However, Wasilewski disclose using a random number to generate a key (see col. 8, lines 5-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Shona's selecting of key with Wasilewski's teaching of frequent key changing that is designed to thwart attempts by unauthorized users to compromise the encryption algorithm by discovering the key (also see col. 8, lines 55-59).

25. In respect to claim 5, Shona and Turban discloses the process in accordance with claim 4. Shona discloses enciphers random number (identifier) with the first authentication key contained in the first card to create enciphered data X transmitted from the second card to the first card (see col. 3, lines 5-8) but do not explicitly disclose the step of selecting the key in a table of keys contained in the first card as a function of

Art Unit: 2134

a program identifier. However, Wasilewski disclose using a random number to generate a key (see col. 8, lines 5-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Shona's selecting of key with Wasilewski's teaching of generating a key as a function an identifier to prevent the same key from repeat used and thus provide a more secure enciphered data.

26. In respect to claim 9, Shona and Turban disclose the process in accordance with claim 8. Shona discloses enciphers random number (identifier) with the first authentication key contained in the first card to create enciphered data X transmitted by the second card to the first card (see col. 3, lines 15-20) but do not explicitly disclose the step of selecting the key in a table of keys contained in the first card as a function of the program identifier. However, Wasilewski disclose using a random number to generate a key (see col. 8, lines 5-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Shona's selecting of key with Wasilewski's teaching of generating a key as a function an identifier to prevent the same key from repeat used and thus provide a more secure enciphered data.

27. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shona (U.S. Patent No. 5,799,085) and Turban (U.S. Patent No. 5,586,166) as applied to claim 2 above, and further in view of Jandrell (U.S. Patent No. 5,365,516).

Art Unit: 2134

28. In respect to claim 7, Shona and Turban disclose the process of claim 6. Shona and Turban do not explicitly disclose wherein the predetermined field comprises at least the call sign of the telecommunication network contained in an identity number of the first card. However, Jandrell discloses using a call sign of the telecommunication network as a system identifier code (see col. 24, lines 19-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teaching of Jandrell by using the call sign as an identification code for the benefit of keeping record for service request and maintaining control.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Nakamo et al. Discloses a customer service system for use in IC card system.

-Kolev et al. Discloses multiple cellular systems with limited SIM card information.

-Pinault discloses a method of making the use of a terminal of cellular mobile radio system more secure and corresponding terminal and user card.

-Iwasaki et al. Discloses connecting apparatus and information processing apparatus.

Rikuna discloses an IC card system employing remote PIN entry card.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (703) 305-7690. The examiner can normally be reached on 8:30-5:00 M-F.

Art Unit: 2134

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-9600.

Examiner Tongoc Tran
Art Unit: 2134

TT
October 30, 2003

Matthew B. Smithers
MATTHEW SMITHERS
PRIMARY EXAMINER
Art Unit 2134